



# Metabolic Model Generalization

Anna Zhukova

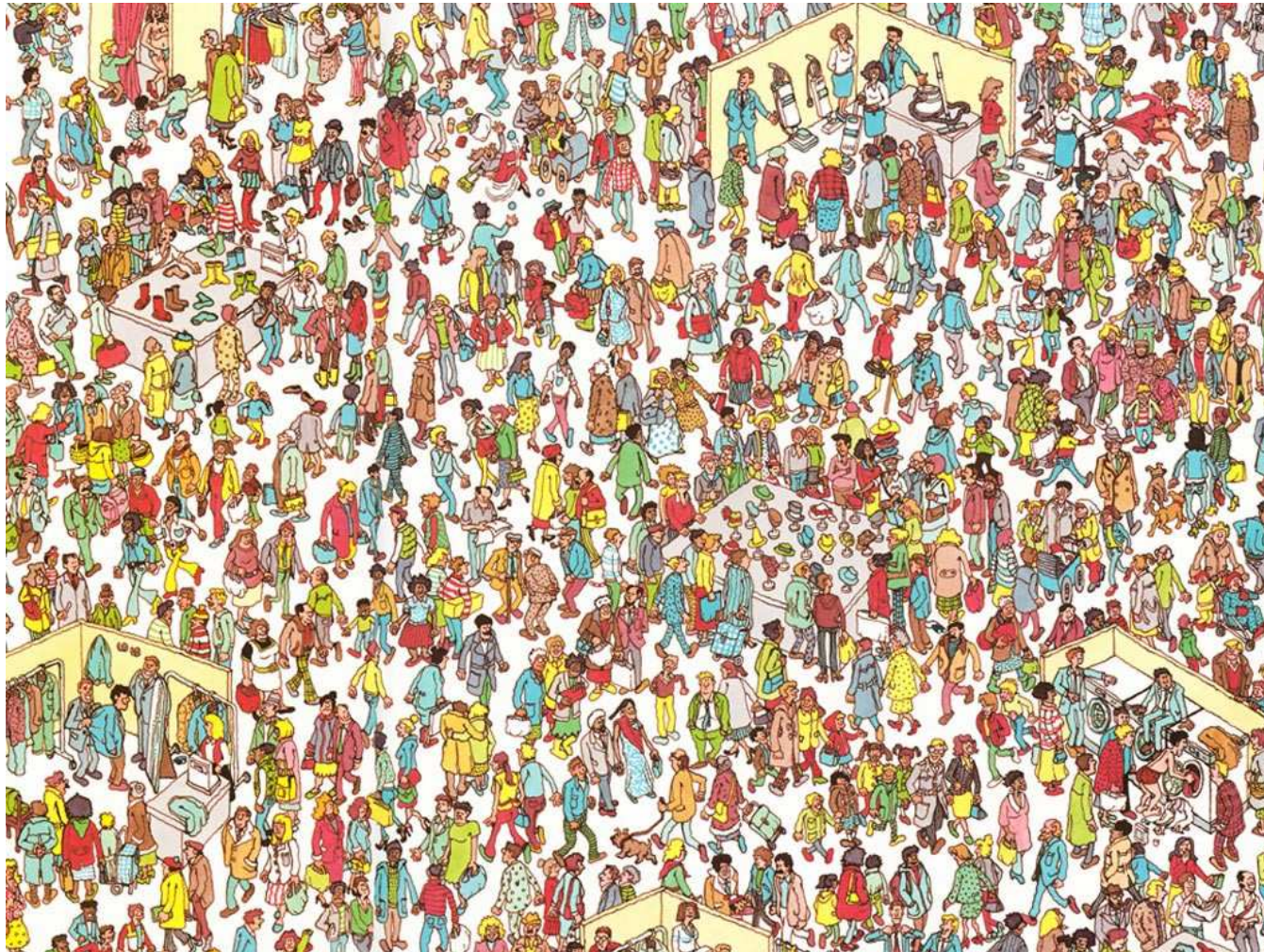
Project-team

**MAGNOME**

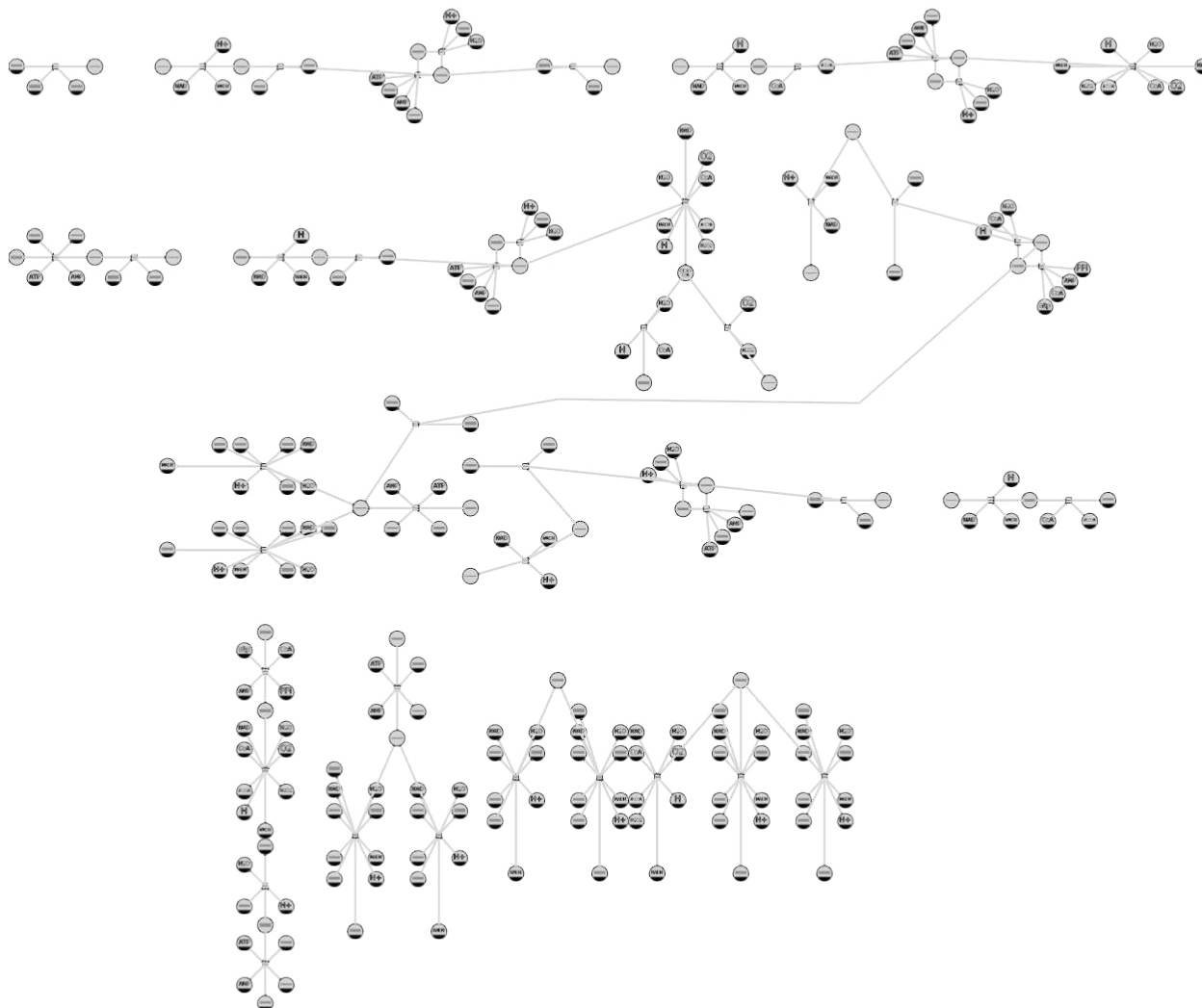
Inria Bordeaux - Sud-Ouest

ICYSB. June 3-10, 2013

# Where's Wally ?

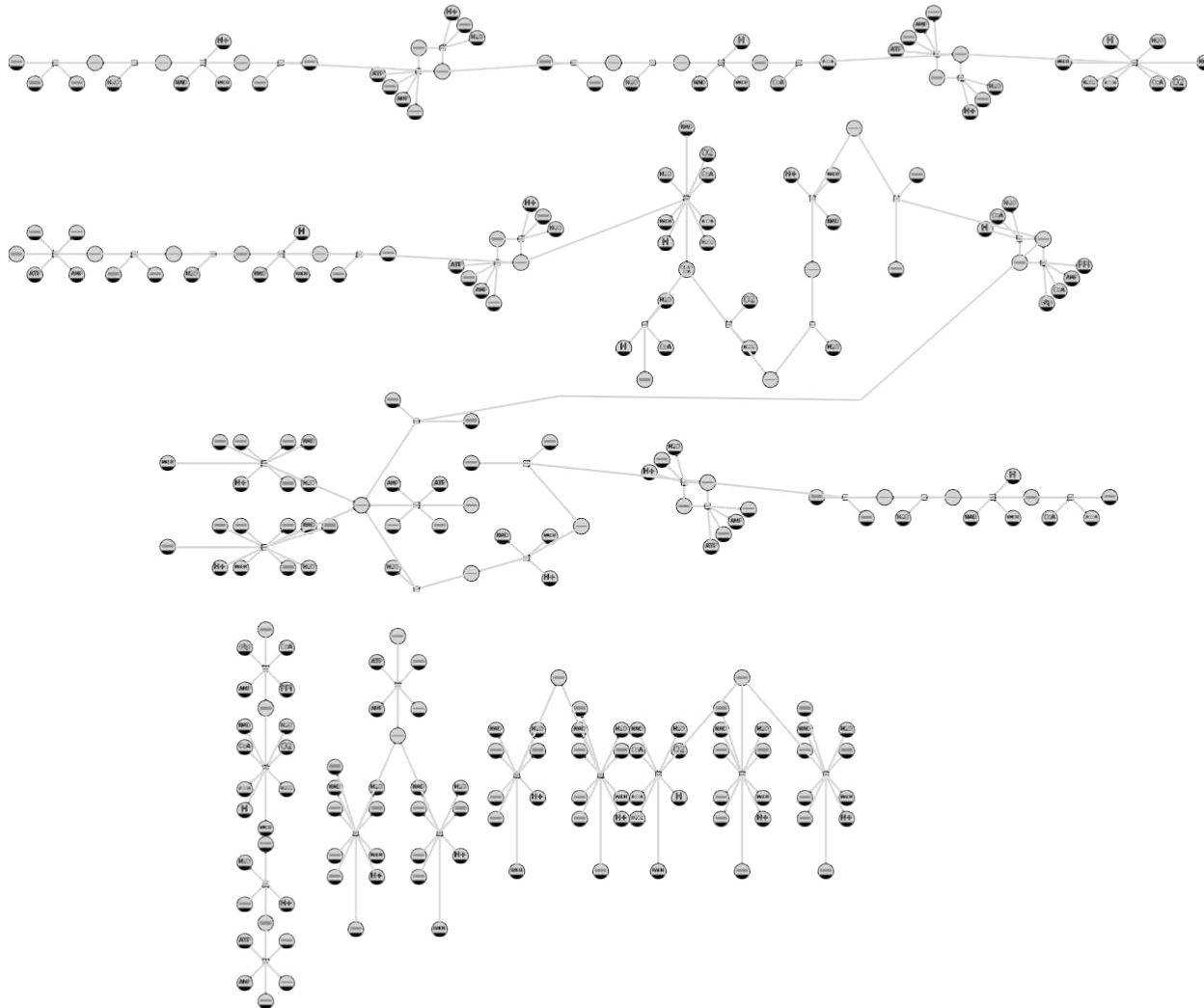


# Where are missing reactions (EC 4.2.1.17) ?

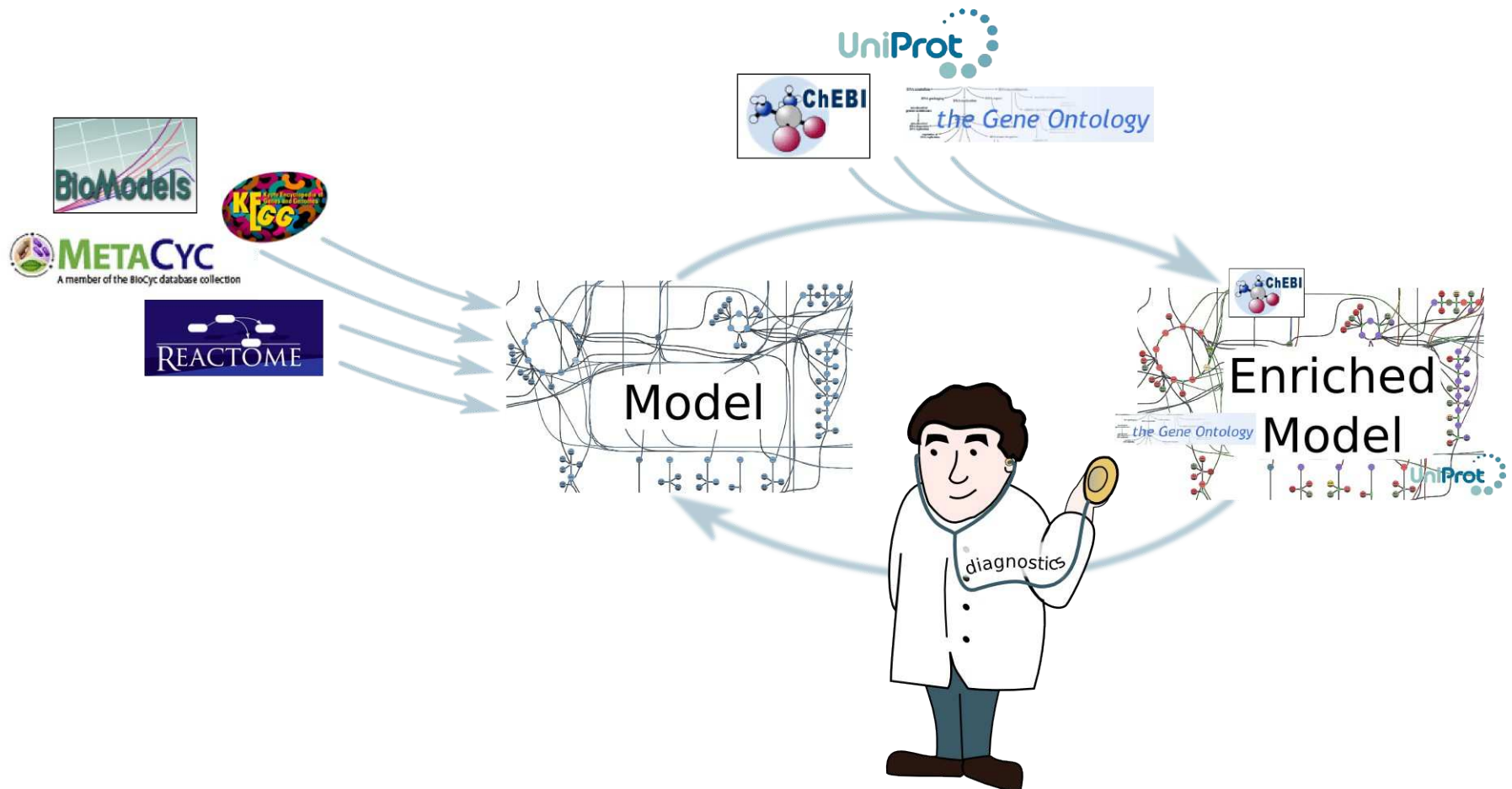




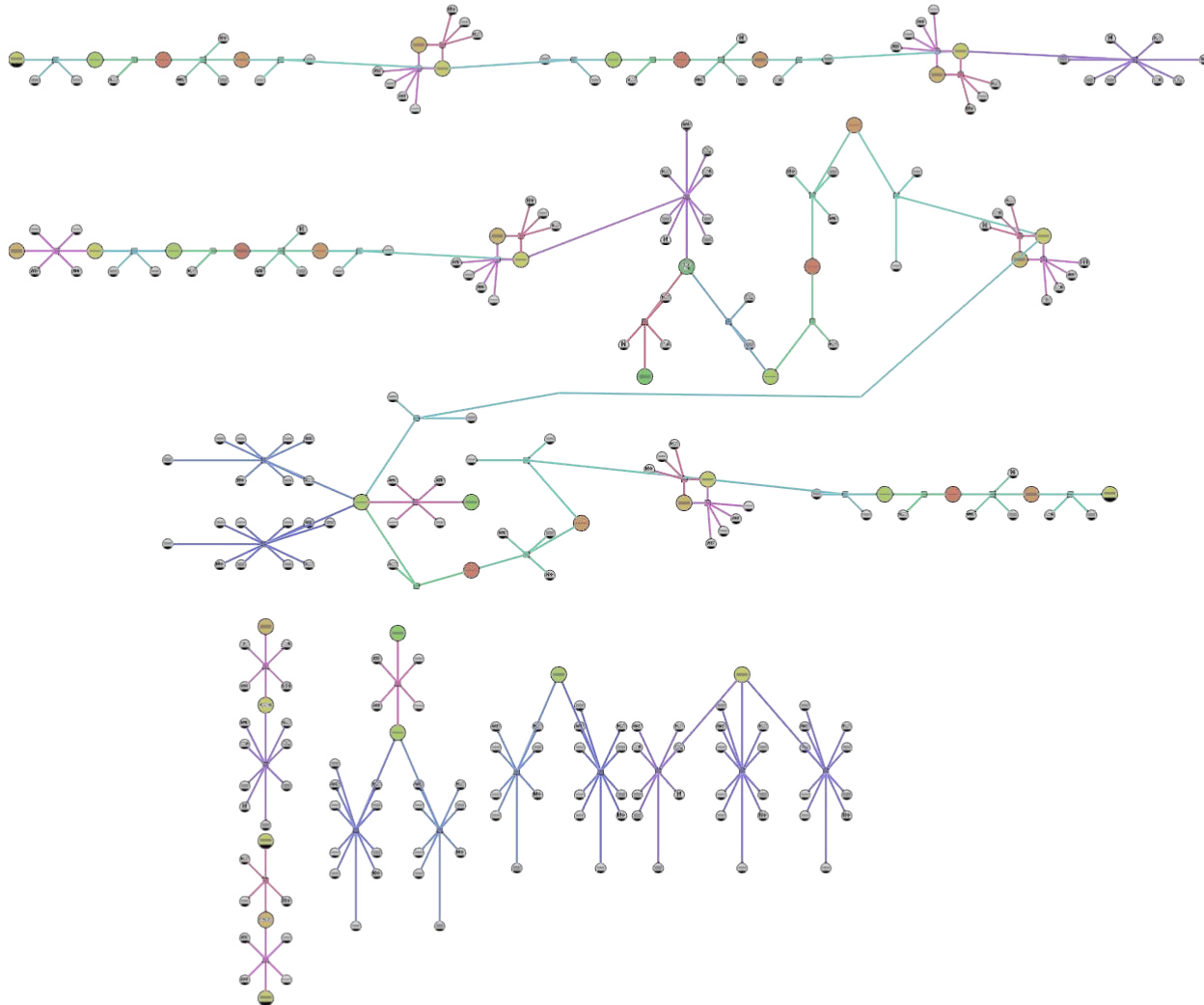
# Not that easy ?



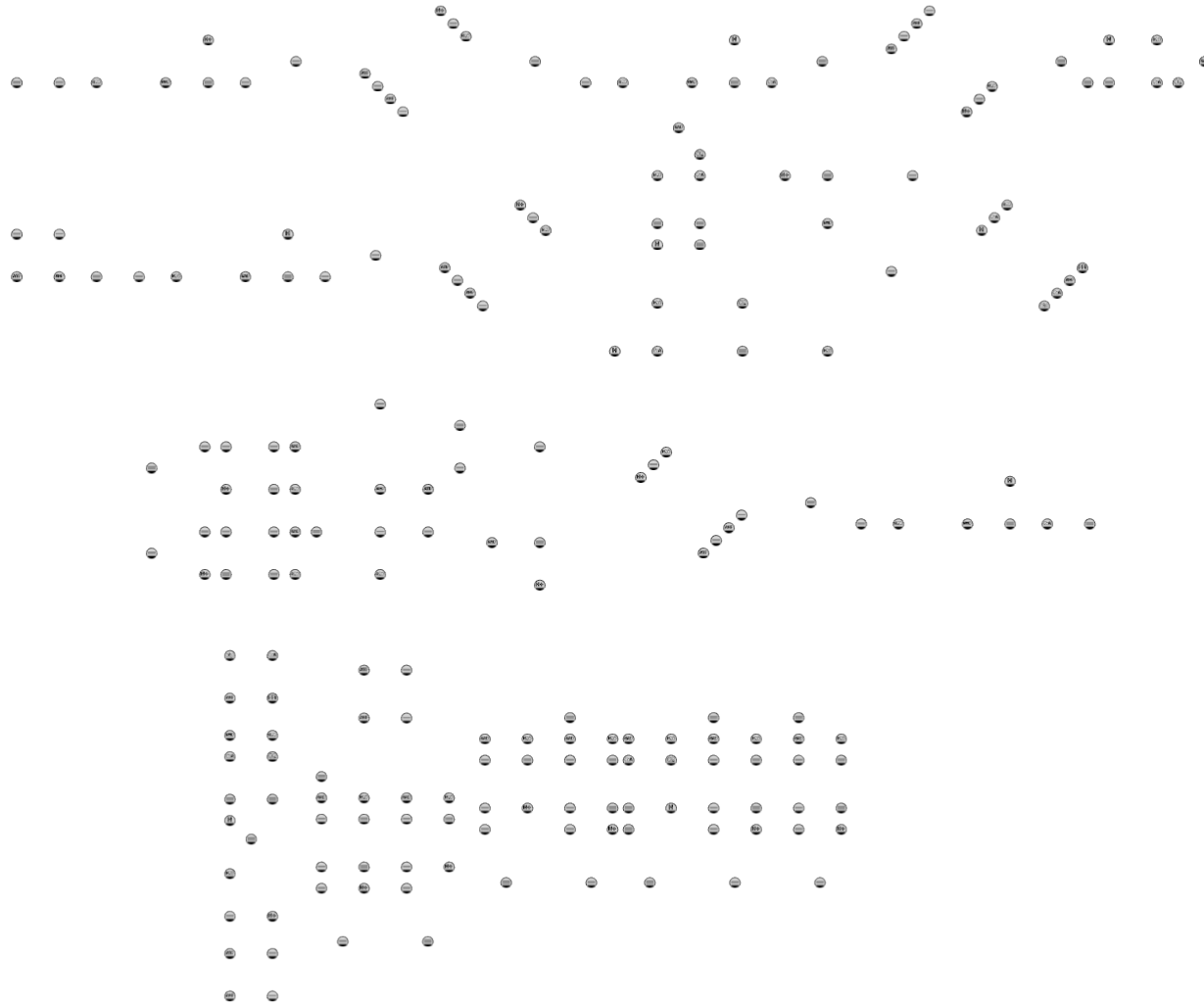
# Model inference and refinement



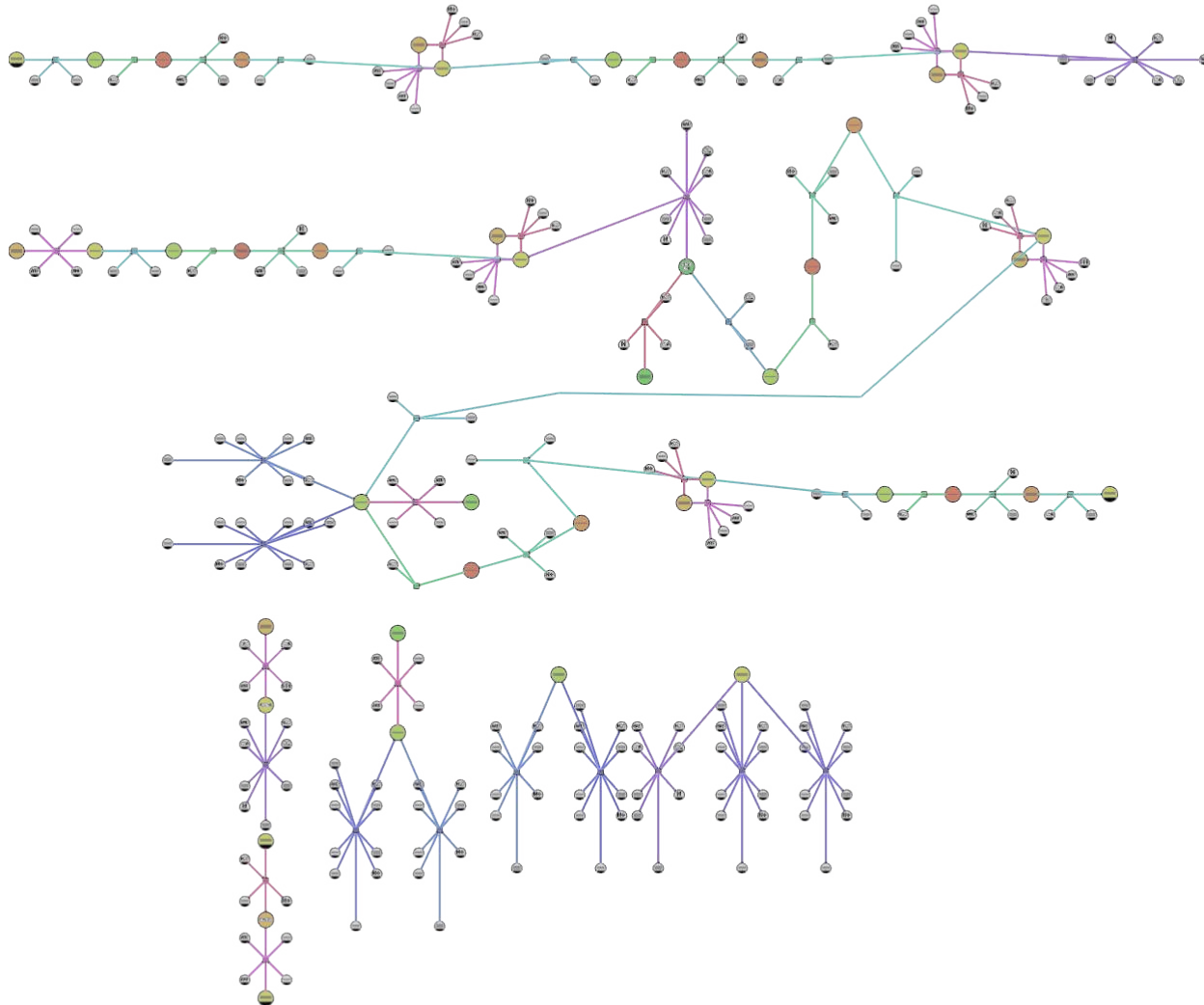
# Let's generalize !



# Let's generalize : ubiquitous species !

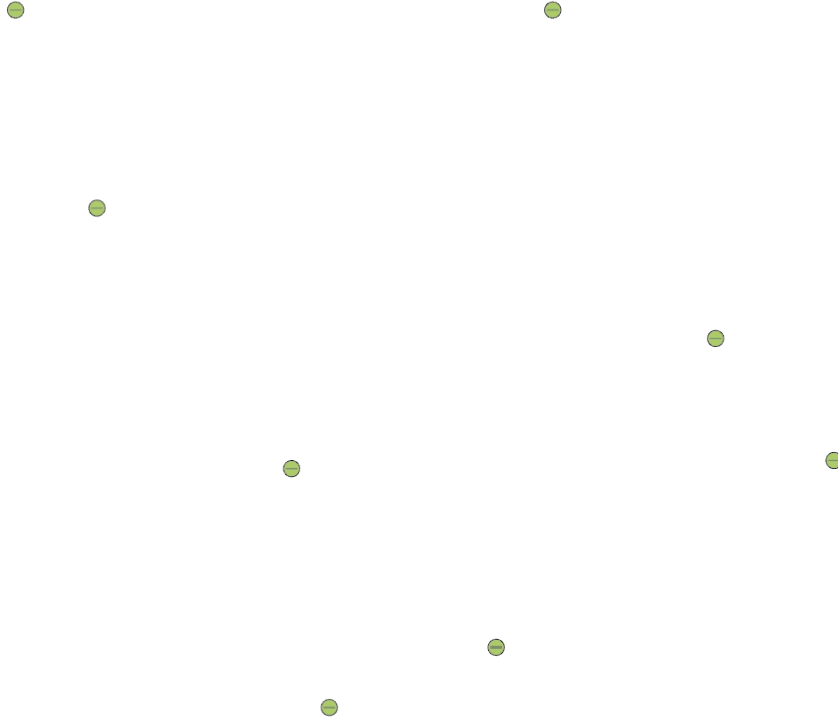


# Let's generalize !

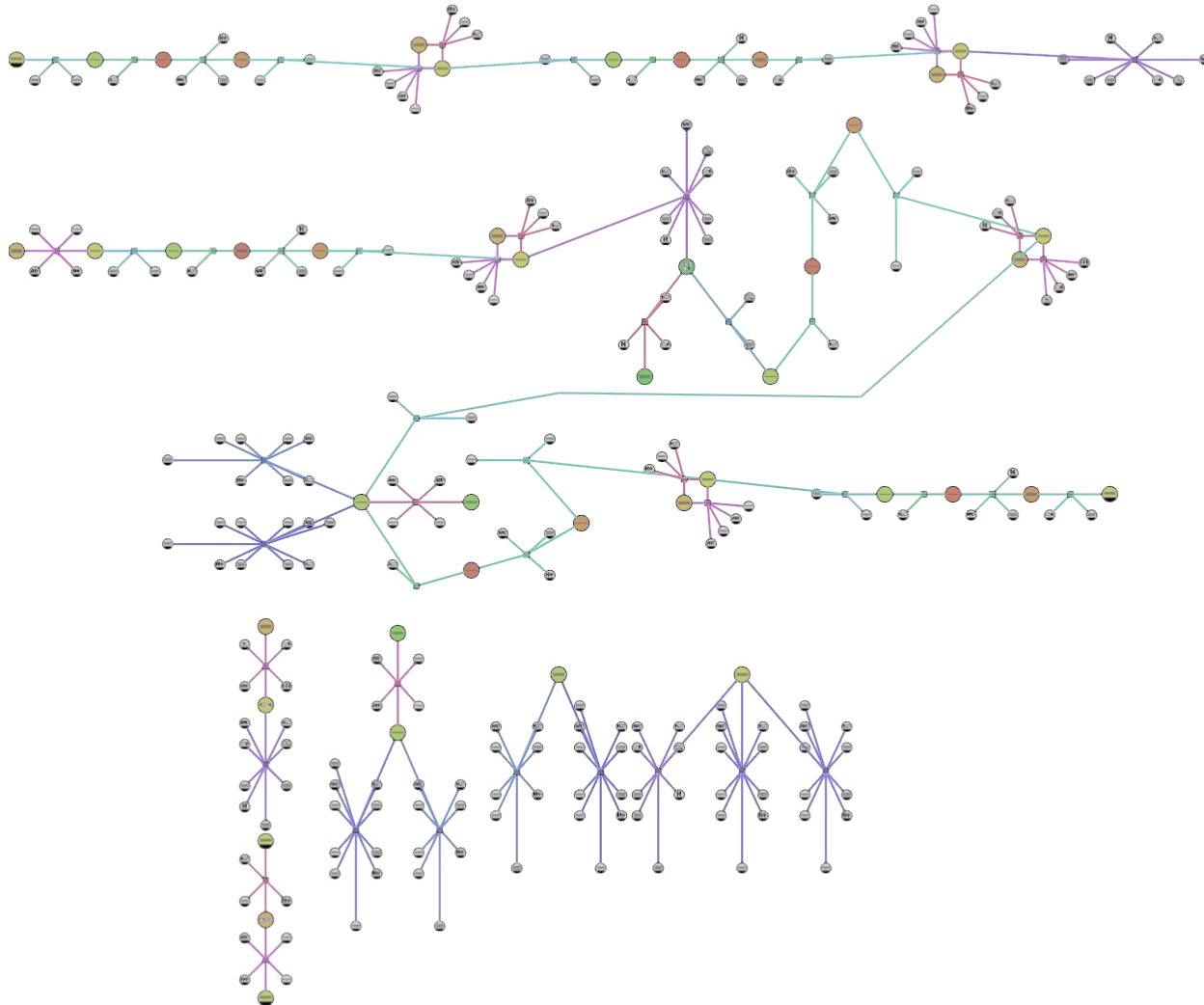




**Let's generalize : fatty acyl-CoA !**



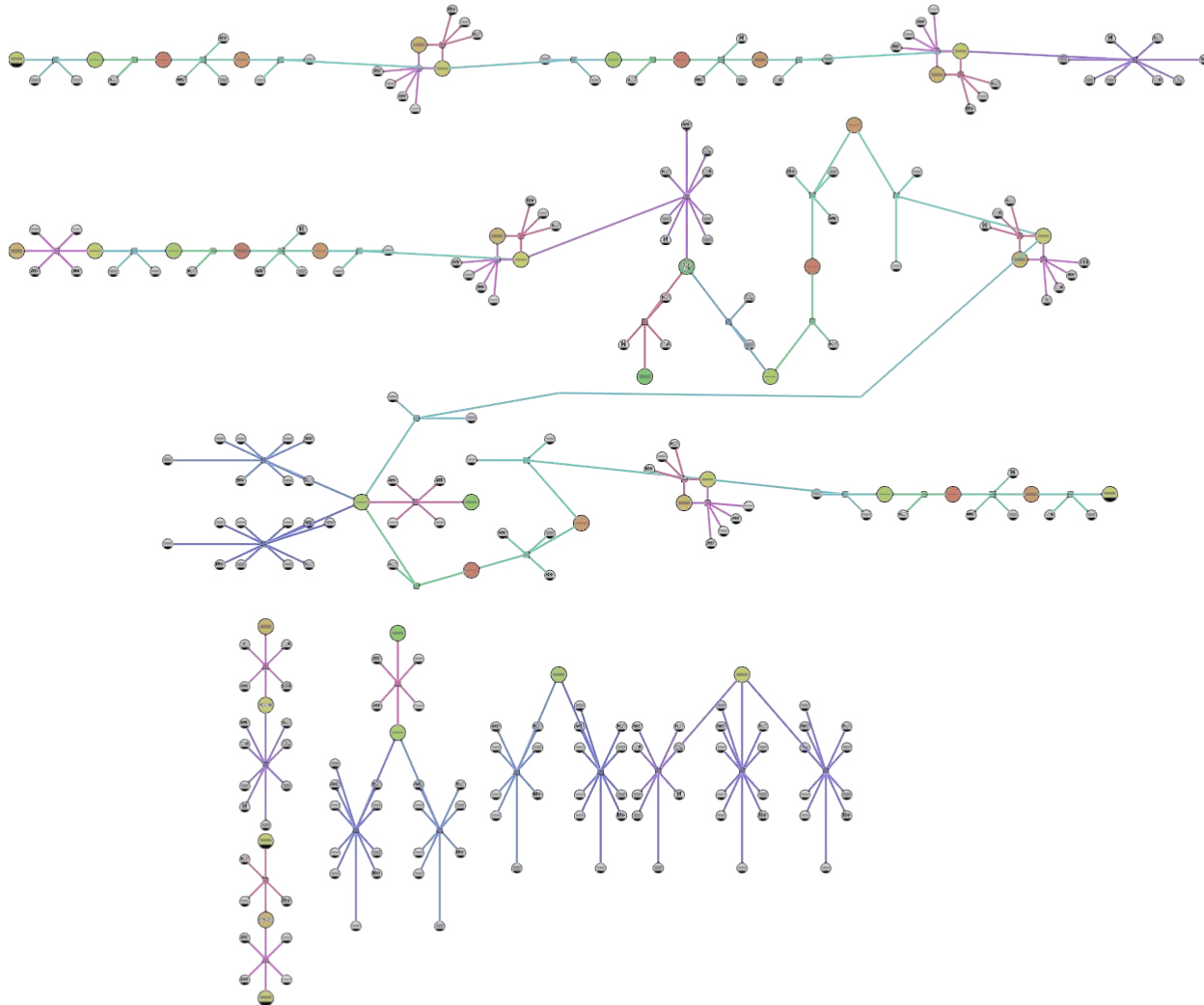
# Let's generalize !



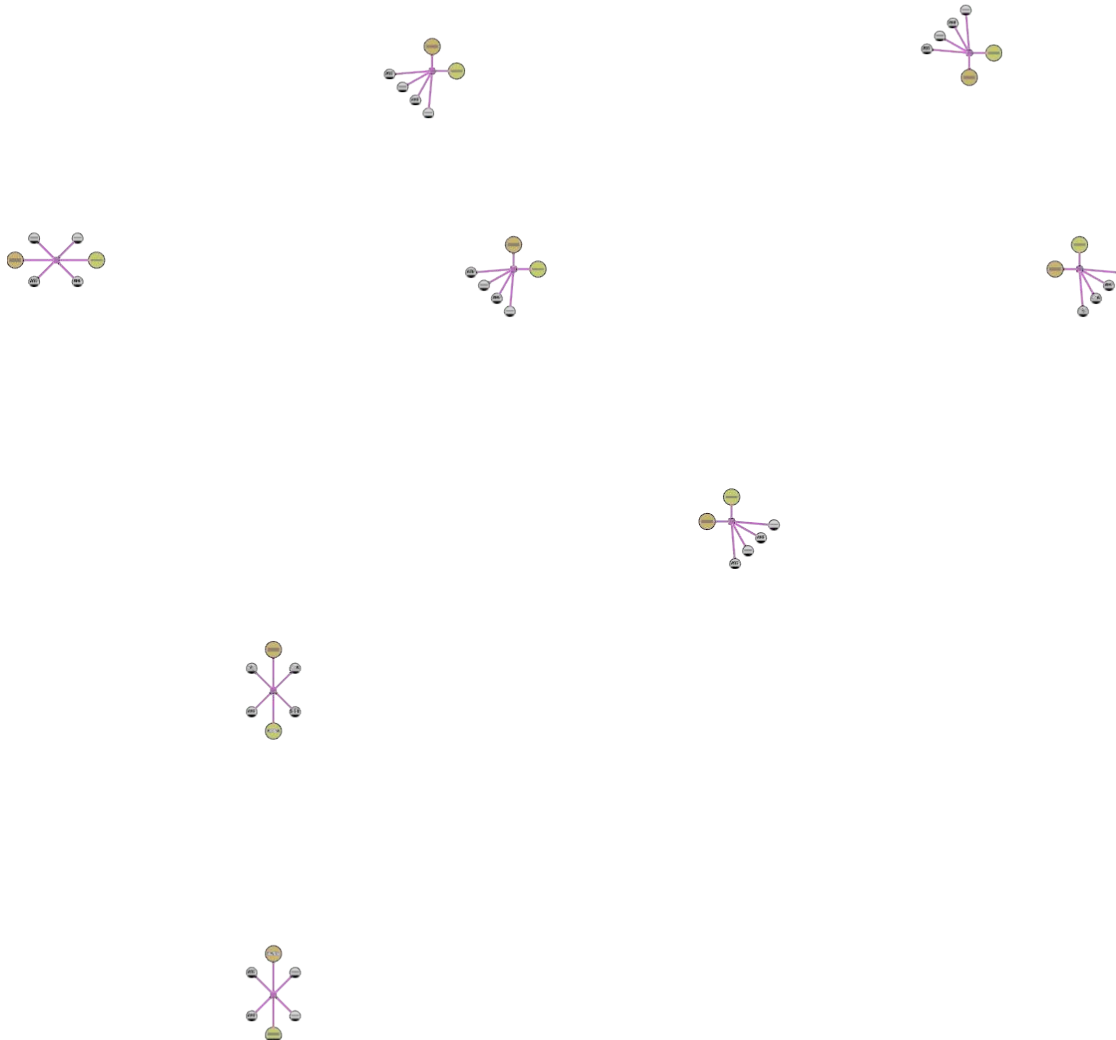
**Let's generalize : oxo-acyl-CoA !**



# Let's generalize !

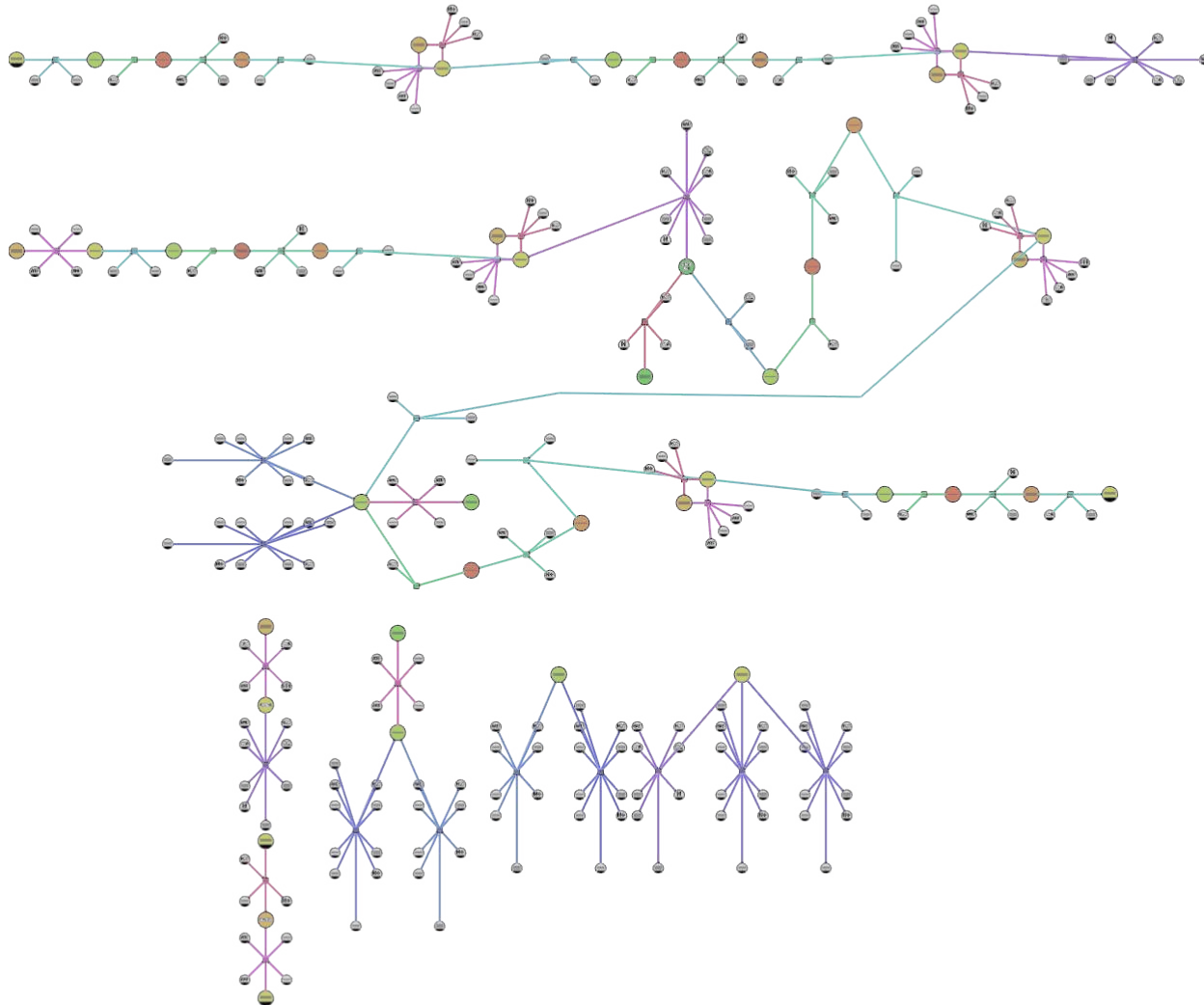


# Let's generalize : fatty-acid--CoA ligase !

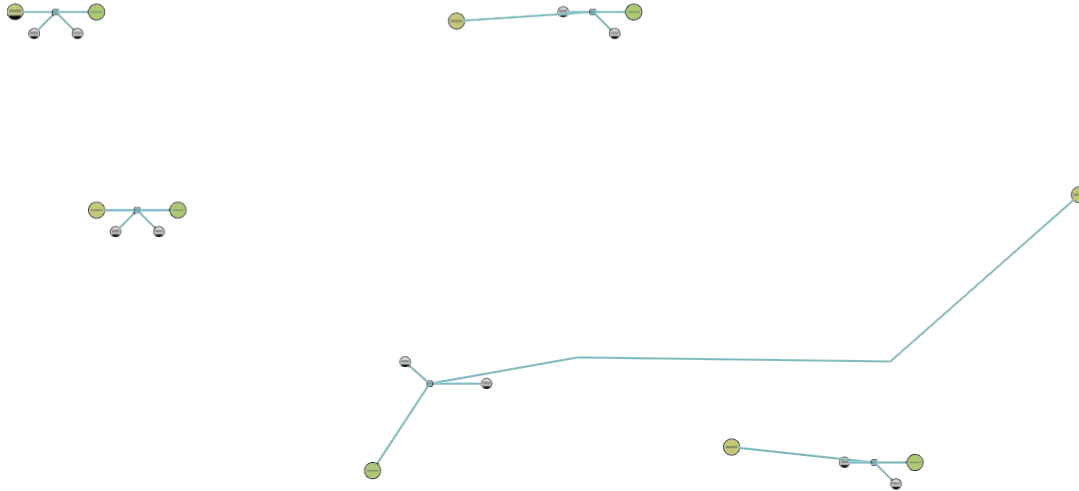




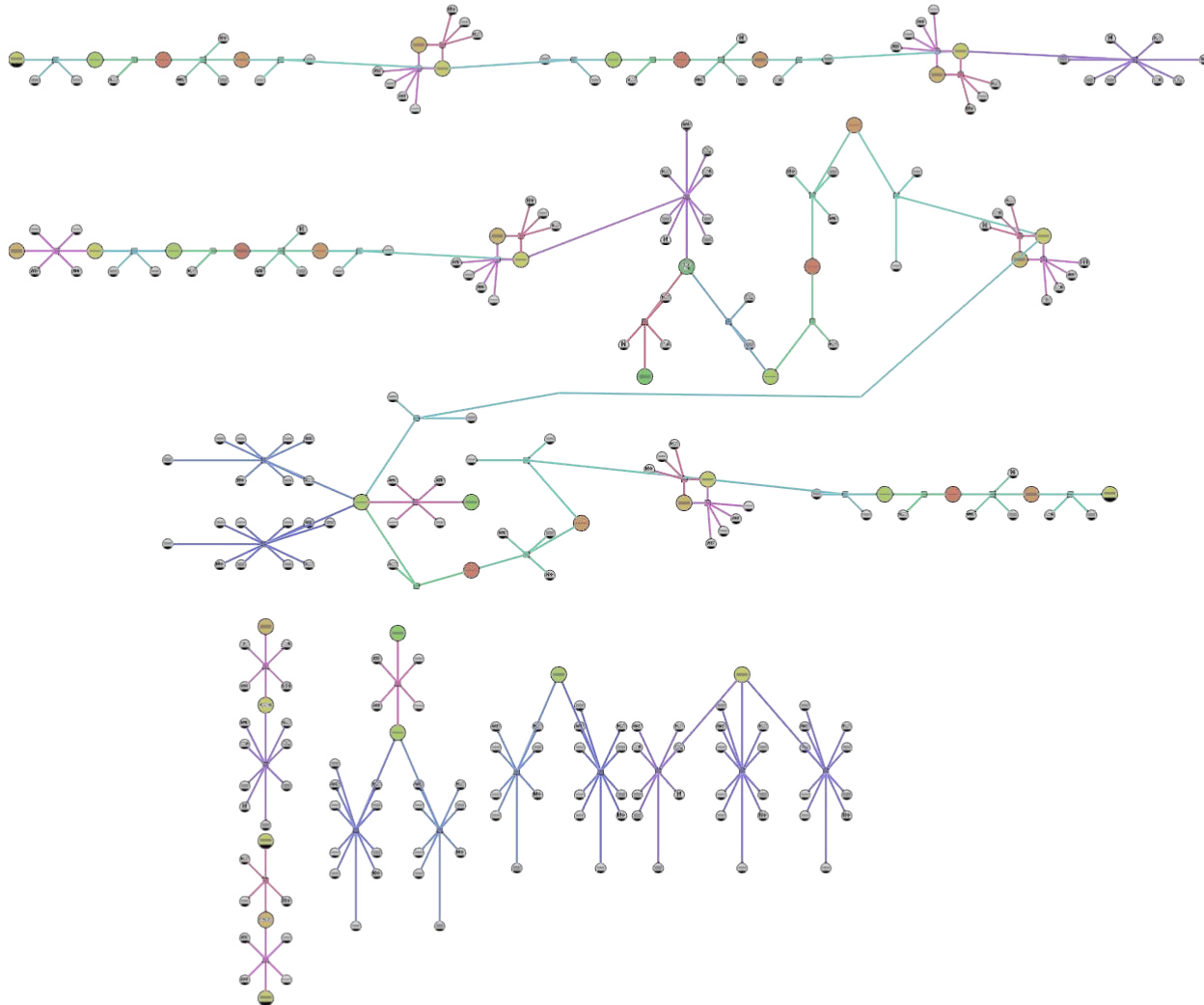
# Let's generalize !



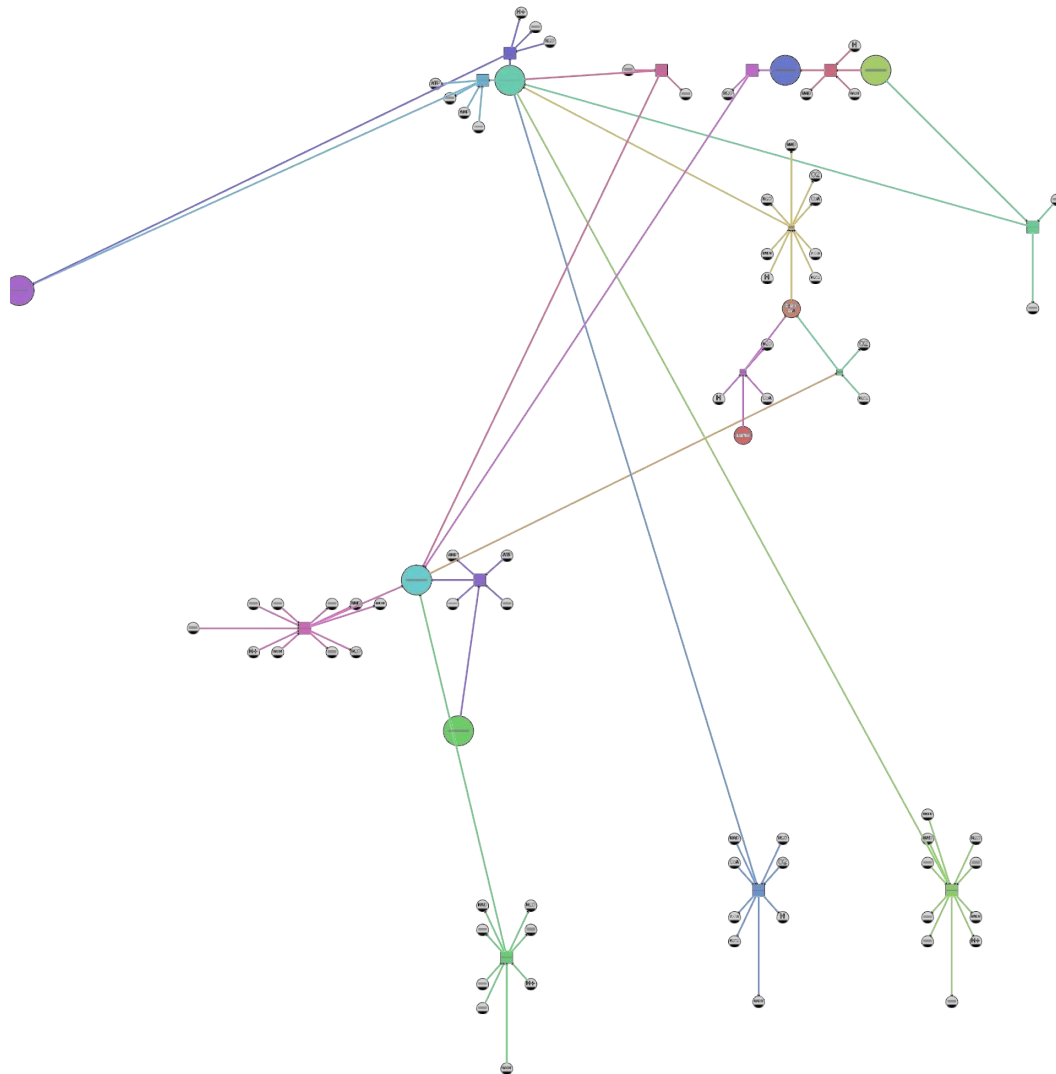
# Let's generalize : acyl-CoA oxidase !



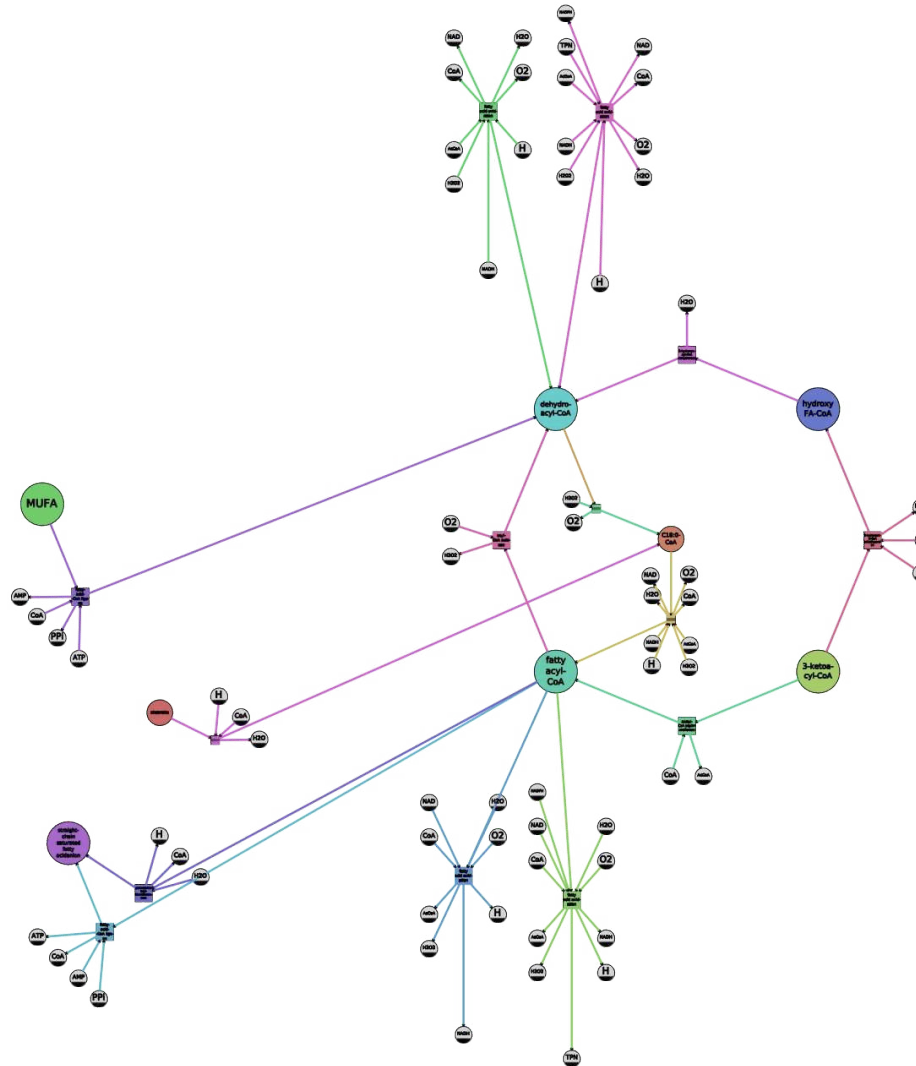
# Let's generalize !



# Let's factor !

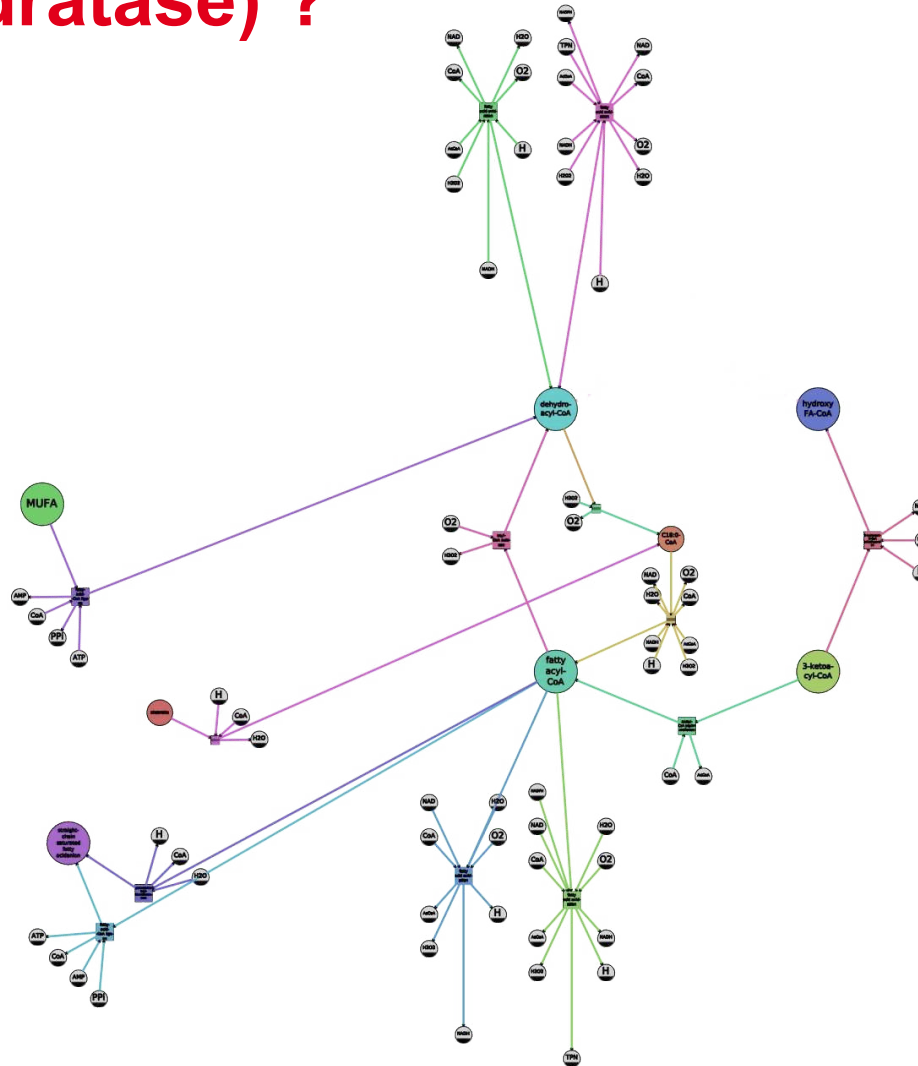


# Let's improve the layout a bit...





# So, where's Wally (aka 3-hydroxyacyl-CoA dehydratase) ?



# Acknowledgements

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